

## A new species of *Tantilla* (Serpentes: Colubridae) from northeastern Guatemala

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*Abstract.*—*Tantilla tecta* is described from near Laguna Yaxhá in northeastern Guatemala. This species belongs to the *taeniata* group and is the only member of this group known from the Petén region. It is characterized by: a narrow pale middorsal stripe restricted to the vertebral scale row; a narrow pale lateral stripe on adjacent portions of the third and fourth scale rows; a broad pale collar that is uninterrupted medially; and 54 subcaudals in the single known specimen. It is most similar to *T. jani* of the Pacific versant of northern Middle America and to *T. slavensi* of the Tuxtla region of southern Veracruz, Mexico, but may be differentiated from these species by the condition of the pale lateral stripes on the body, the extent of the pale nuchal collar, the coloration of the paraventral scale row, the number of ventrals and subcaudals, and relative tail length.

*Resumen.*—Se describe el colúbrido *Tantilla tecta* de las inmediaciones de la Laguna Yaxhá, Petén, Guatemala. Esta especie pertenece al grupo *taeniata* y es el único miembro del grupo conocido de la región petenera. Se caracteriza por poseer: una línea dorsal angosta restringida a la hilera vertebral de escamas; una línea lateral pálida en las áreas adyacentes de las hileras de escamas tres y cuatro; un collar pálido y ancho no interrumpido dorsalmente; y 54 subcaudales en el único espécimen conocido. Se parece más a *T. jani* de la vertiente pacífica de Guatemala y Chiapas y a *T. slavensi* de la región de Los Tuxtlas en el sur de Veracruz, México, pero se diferencia de estos por varias características, incluyendo la condición de la línea lateral pálida del cuerpo, la extensión del collar pálido, la coloración de la hilera de escamas paraventrales, el número de escamas ventrales y subcaudales, y el largo relativo de la cola.

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The extensive lowlands of the Petén region of Guatemala have been the focus of a number of herpetological investigations summarized by Campbell (1998), Duellman (1963), Lee (1980, 1996), and Stuart (1934, 1935, 1937, 1958). Relatively few species of reptiles probably remain to be discovered in this region, although our knowledge of the distributions and life histories for most species remains poor. Nevertheless, certain small, secretive snakes are notorious for their ability to escape detection. Among these are members of the genus *Tantilla*, of which several species are widespread in the Petén region. The *taeniata* group of *Tantil-*

*la* has a Middle American distribution and is composed of a dozen species, including the one herein described. The fact that half of the species in this group have been described since 1971, and that over half the species remain known from fewer than a dozen specimens, provides some indication of the difficulty of finding these snakes. It is likely that the combination of secretive habits, disjunct distributions, and perhaps rarity in nature contribute to the infrequency with which these snakes are encountered.

A single specimen of the *taeniata* group was recently discovered near Laguna Yaxhá

in Petén, a locality from which no member of this group was known previously. We have compared this specimen with material housed in the University of Texas at Arlington and the University of Kansas collections, as well as carefully consulted the thorough descriptions provided by Pérez-Higareda et al. (1985), Savitsky & Smith (1971), Wilson (1982, 1983), and Wilson & Meyer (1971). This specimen cannot be allocated to any known species and we therefore propose that this species be known as

*Tantilla tecta*, new species

Figs. 1–2

*Holotype*.—The University of Texas at Arlington (UTA) R-41160 (previously UVG 1742), an adult female from the slope flanking the NE side of Laguna Yaxhá, Petén, Guatemala (17°03'43"N, 89°23'12"W). Collected by Cristian Granizo on 29 Jun 1992. This locality lies in Tropical Dry Forest at about 220 m.

*Diagnosis*.—A small species of *Tantilla* of the *taeniata* group (sensu Wilson, 1983) that may be distinguished from all other members of the genus by having: a narrow pale middorsal line restricted to the vertebral scale row; a narrow pale lateral line on adjacent portions of the third and fourth scale rows that extends onto the tail; a broad pale collar that is not interrupted medially; and 54 subcaudals in the single known specimen. In *T. briggsi*, *T. cuesta*, *T. cuniculator*, and *T. tayrae* the pale middorsal line is absent or restricted to a few scales on the anterior portion of the body, and in *T. taeniata* the middorsal stripe usually is expanded laterally to include all of the vertebral scale row and adjacent portions of the paravertebral rows. *Tantilla taeniata* can also be distinguished from *T. tecta* by the pale coloration on the top of the head which is distinctly paler than the dark borders of the nuchal collar. The dorsum of the head in *T. tecta*, in contrast, is about the same as the borders of the collar. *Tantilla flavilineata*, *T. oaxacae*, and *T. re-*

*ticulata* differ from *T. tecta* in having a broader pale lateral stripe located on the fourth dorsal scale row and adjacent portions of the third and fifth rows.

*Tantilla tecta* differs from all species in the *taeniata* group except *T. jani* and *T. slavensi* in having a narrow pale middorsal line confined to the vertebral scale row. *Tantilla jani* differs from *T. tecta* in having less distinct pale lateral stripes that usually terminate on the posterior part of the body; a pale collar that includes the posterior portions of the parietals, posterior temporals, and ultimate supralabial; a pale postocular spot that includes the lingual margin of the fifth supralabial; the first pair of infralabials usually in contact; 37–47 subcaudals in females; and a relative tail length from 15 to 18% of the total length (versus 23% in female holotype of *T. tecta*). *Tantilla slavensi* may be distinguished from *T. tecta* in having part of the paraventral scale row pale (versus ground color from dorsum extending onto ventrals); a pale nuchal collar that is interrupted medially (versus not interrupted) and no more than one scale in length (versus two); a pale lateral line that becomes obscure on the base of the tail (versus evident even on distal portion of tail); the pale lateral line with a narrow dark brown border above, but not distinctly bordered below (versus a distinct dark border below pale lateral line which is darker than the border above); and 158–159 ventrals in two known females (versus 148 in single female). A higher number of ventrals is present in females of *T. flavilineata* (152–164) and *T. reticulata* (162–173) than in *T. tecta* (148), whereas slightly lower numbers are present in females of *T. oaxaca* (145), *T. tayrae* (140–146), and *T. cuesta* (147). A higher number of subcaudals is present in females of *T. taeniata* (58–65) and *T. reticulata* (58–70), and fewer subcaudals are present in females of *T. flavilineata* (43–49), *T. jani* (37–47), *T. striata* (31–34), *T. oaxacae* (48), *T. cuniculator* (48–53), *T. tayrae* (44–46), and *T. cuesta* (45) than in *T. tecta* (54). Undoubtedly, as many of

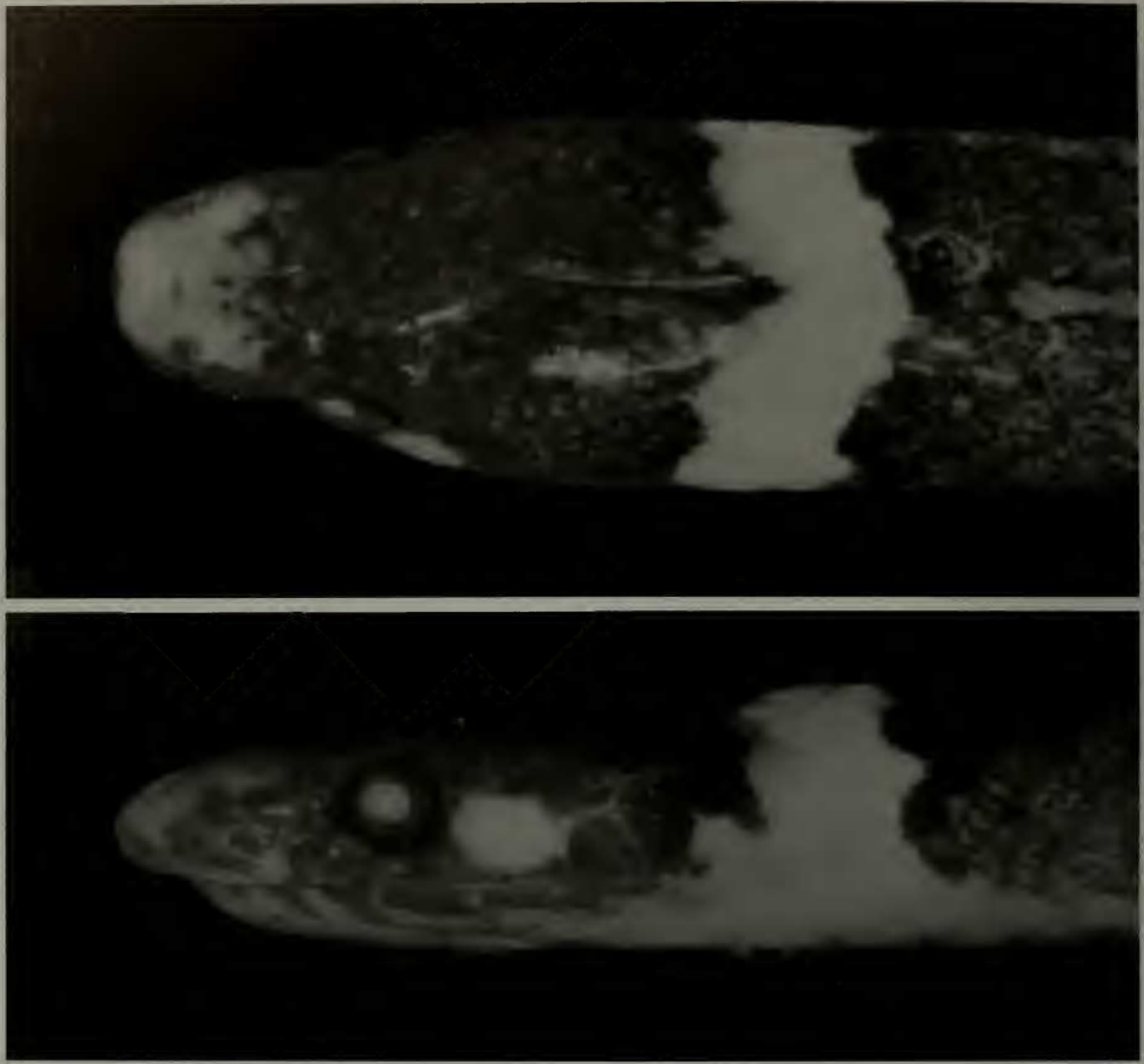


Fig. 1. Dorsal (upper) and lateral (lower) aspects of the head of *Tantilla tecta*, holotype (UTA R-41160). Head length 6.7 mm from front face of rostral to posterior end of mandible.

these species become known from more adequate samples, the ranges for some segmental counts will overlap.

*Description.*—An adult female, 222 mm in total length; tail length 51 mm (23% of total); head length 6.7 mm from front face of rostral to posterior end of mandible; head width 4.3 mm at broadest point (at level of angle of mouth); head scarcely distinct from neck; snout truncate in dorsal view; eye small, snout about 2.4 times as long as horizontal distance across eye; pupil sub-circular; rostral about 1.6 times broader than high; internasals 1.7 times wider than long, laterally contacting anterior and pos-

terior nasals; prefrontals large, slightly wider than long, laterally contacting posterior nasal, prefrontal, and narrowly contacting second supralabial; median prefrontal suture 0.4 times as long as frontal; frontal about 1.3 times longer than wide; parietals about 1.8 times longer than wide, median suture about 0.9 of frontal length; nasals completely divided, nostril located in posterior portion of anterior nasal; no loreal; 1/1 preoculars; 2/2 postoculars; temporals 1 + 1, separating fifth, sixth, and seventh supralabials from parietal; supralabials 7/7, the first contacting nasals, the second contacting postnasal, prefrontal, and preocular,

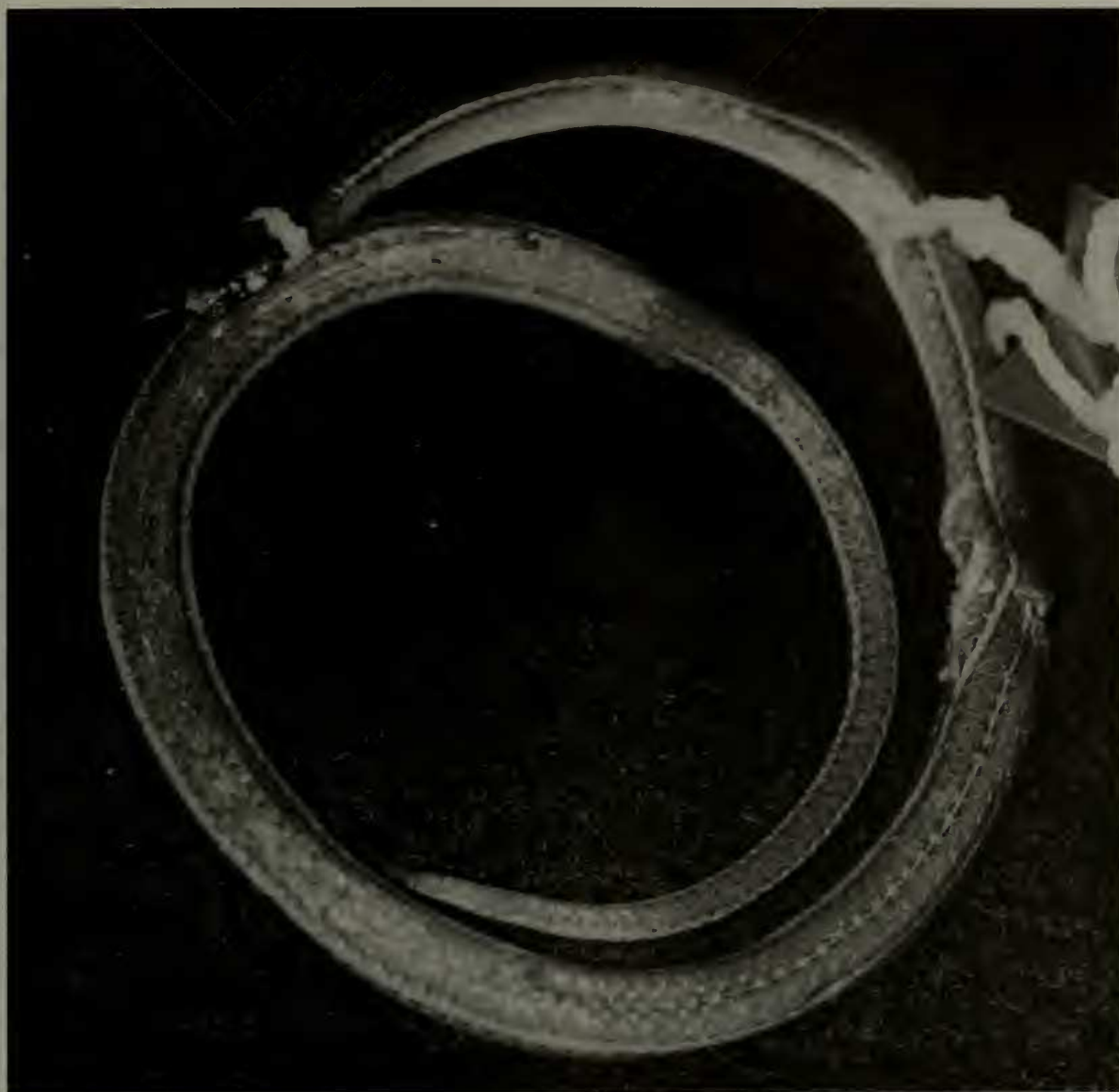


Fig. 2. *Tantilla tecta*, holotype (UTA R-41160), 222 mm TL (reproduced from UTA Slide No. 17660).

the third contacting preocular, the third and fourth contacting orbit, the fifth and sixth contacting anterior temporal, and the seventh the largest and contacting anterior and posterior temporals; mental about twice as broad as long, contacting anterior pair of chinshields; anterior chinshields well developed, about twice as long as wide; posterior chinshields well differentiated from gulars, about half of size of anterior chinshields; posterior chinshields separated from first ventral by two gulars and two preventrals; infralabials 6/6, first four pairs contacting anterior chinshields, fourth pair largest; dorsal scales smooth, in 15 longitudinal rows throughout length of body, no apical pits apparent; dorsal scales in 4 rows

at level of tenth subcaudal; ventrals 148; anal divided; subcaudals 54, paired; anal glands extending posteriorly the length of four subcaudals.

In preservative (alcohol after formalin), ground color brown; a beige middorsal stripe arising about two scale lengths behind collar, extending most of the snout-vent length but becoming obscure on the posterior fourth of body; middorsal stripe occupying about median third of vertebral scale row, edged with dark brown laterally; beige lateral stripes on upper portion of scale row 3 and lower portion of scale row 4, edged with dark brown above and below, beginning about four scale lengths behind collar and extending to the tip of the tail; ground

color below lateral stripe a bit darker than that on either side of the middorsal stripe; dorsal ground color extending to lateral portions of ventrals and subcaudals, paraventral scale row not pale; venter of body and tail cream-colored; top of head dark brown with pale spot on upper portion of rostral, internasals, and anterior two-thirds of prefrontals; a distinctive white nuchal collar immediately behind parietals and secondary temporals, collar 1–2 scales long, bordered posteriorly with black, merging with pale coloration of venter, not interrupted middorsally, a small intrusion of nuchal collar on lower posterior part of ultimate supralabial; a small, indistinct spot on adjacent portions of first and second supralabials; a prominent white postocular spot including most of fifth supralabial (but not lingual margin) and adjacent portions of lower postocular and anterior temporal; infralabials mostly pale except along lip margin and posterior portion of individual scales, fourth supralabial also with a dark margin medially.

The right maxillary bears 13 small teeth, which increase in size posteriorly; a small diastema separates the last two teeth which are enlarged and have lateral grooves. All maxillary teeth are compressed anteroposteriorly and bladellike.

*Etymology.*—The trivial name is derived from the Latin *tectus*, meaning concealed or secret, in allusion to the ability of this species to escape detection despite many years of field work in the region.

*Remarks.*—The *taeniata* group of *Tantilla*, as presently envisioned (Wilson 1983, Pérez-Higareda et al. 1985), consists of 12 species, including the species described here: *briggsi*, *cuesta*, *cuniculator*, *flavilineata*, *jani*, *oaxacae*, *reticulata*, *slavensi*, *striata*, *taeniata*, *tayrae*, and *tecta*. Based on the presumably derived condition of the pale longitudinal stripes on the body, *T. tecta* appears to be most closely related to *T. jani* and *T. slavensi*. Both *T. jani* and *T. slavensi* are geographically remote from *T. tecta* and occur in more mesic, less seasonal

habitats (Tropical and Premontane Wet Forests). *Tantilla jani* is found at elevations of 305–960 m (Wilson 1985) along the Pacific versant of Middle America from eastern Oaxaca, Mexico, into Guatemala. *Tantilla slavensi* occurs in the Los Tuxtlas region of southern Veracruz, Mexico, over 600 km to the WNW of the type-locality for *T. tecta*, and is known from 50–800 m (Pérez-Higareda et al. 1985). Although the holotype of *Tantilla tecta* comes from an area usually considered to be covered with Tropical Dry Forest, Laguna Yaxhá is often thought to be near the boundary between Tropical Dry and Tropical Moist Forest, with the latter extending to the south shore of the lake. Certainly, the demarcation between these two types of forest is not clear and many of the hillsides and depressions to the north of the lake are covered with patches of forest that might be associated with Tropical Moist Forest. Nevertheless, the entire region around Laguna Yaxhá experiences a highly seasonal climate with most of the precipitation falling from May to December and a dry season extending from January through April.

The only species of *Tantilla* with which *T. tecta* is possibly sympatric in the Petén faunal area of Campbell & Vannini (1989) are *T. moesta*, *T. cuniculator*, and *T. schistosa*. *Tantilla moesta* has a long pale nuchal collar that extends posteriorly from the parietals for a length of at least three dorsal scales and usually includes the posterior-most three supralabials, the dorsum is uniformly dark brown or black without any longitudinal striping, and the venter is uniformly dark. *Tantilla cuniculator* has only the slightest indication of (or completely lacks) a pale middorsal stripe, the pale lateral stripe is less distinct than in *T. tecta*, the pale nuchal collar is usually broader, and the pale postocular spot usually includes the lingual margin of the fifth supralabial. *Tantilla schistosa* has a uniformly colored dorsum without longitudinal stripes and 24–40 subcaudals. *Tantillita canula* and *T. lintoni* also occur in Petén, but they

are easily distinguished from *T. tecta* in lacking pale nuchal collars and pale lateral stripes, and having the middorsal stripe (if present) ill-defined and confined to the posterior part of the body and the tail.

#### Acknowledgments

We thank Michael Dix of the Universidad del Valle de Guatemala (UVG) for allowing us to report on the material in his care. Permits for conducting research in Guatemala were granted by officials of the Consejo Nacional de Areas Protegidas (CONAP); we are especially grateful to Lic. Oscar F. Lara and Licda. Mygdalia Garcia de Solórzano. This material is based in part upon work supported by the Texas Advanced Research Program under Grant No. 003656-001 to JAC.

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